

**POWER SAVING ZERO PRUNING ALGORITHM
FOR FAST FOURIER TRANSFORM (FFT) CIRCUITRY**

ABSTRACT OF THE DISCLOSURE

A fast Fourier transform (FFT) circuit from which unneeded butterfly computation modules can be effectively pruned for specific applications. Each module that is not needed is pruned by injecting zero signals into it, thereby minimizing the power dissipated in the pruned circuit. A multiplexer integrated into each butterfly module output (or input) line allows the line signal to be either forced to zero or allowed to carry a nonzero signal.